

**ABSTRACT OF THE DISCLOSURE**

In a configuration model producing apparatus, a simplification candidate portion automatic extracting means produces a configuration by expanding the configuration model into  
5 an outside by a reference parameter, and also a configuration by reducing the configuration model into an inside by the reference parameter. The expanded configuration and the reduced configuration are compared with the configuration model, respectively, thereby extracting partial configurations, which  
10 disappear and are reversed therefrom. Removing the partial configuration coincident with a predetermined condition among the configurations, an analytical configuration model is produced, being necessary for use in analyzing.